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CLAIMSPTO 12/16/02 CB 07/21/05

1.(Amended) A stable agricultural solids suspension readily dispersible in water, the suspension comprising:

- a. agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt.% passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; [and]
- c. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol; and
- d. methylthio-α-hydroxybutyric acid.

**CLAIMS 2-9 (ORIGINAL)** 

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2. The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 20 wt.% and 80 wt.%; the concentration of the glycol liquid is between about 20 wt.% and about 80 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

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- 3. The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 50 wt.% and about 70 wt.%; the concentration of the giycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.
- 4. The agricultural solids suspension of Claim 1, wherein the agricultural solids consist of at least one member of the group consisting of ammonium sulfate ((NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>), diammonium phosphate ((NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>) and the isopropylamine salt of N-(phosphonomethyl) glycine.
- The agricultural solids suspension of Claim 1, wherein the molecular weight of the non-ionic surfactant is between about 300 and 1000.
- 6. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)<sub>9.5-11</sub> ethanol, dodecylphenoxy poly(ethylene oxide)<sub>9</sub> ethanol, octylphenoxy poly(ethylene oxide)<sub>7</sub> ethanol,

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octylphenoxy poly(ethylene oxide)<sub>5</sub> ethanol, and nonylphenoxy poly(ethylene oxide)<sub>4</sub>.

- 7. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of a C<sub>12</sub>-C<sub>14</sub> secondary aliphatic alcohol (ethoxylate)<sub>9</sub>, a C<sub>12</sub>-C<sub>14</sub> secondary alcohol (ethoxylate)<sub>12</sub>, undecanol (ethoxylate)<sub>9</sub> and oleyl (ethoxylate)<sub>10</sub>.
- 8. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is dodecylphenoxy poly(ethylene oxide)<sub>9,5-11</sub> ethanol.
- The agricultural solids suspension of Claim 1, wherein the glycol liquid
   is propylene glycol.

10.(Amended) A stable suspension of ammonium sulfate ((NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>) readily dispersible in water, the suspension comprising:

- a. ammonium sulfate particles more than about 99 wt.% passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids;
- c. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol; and
- d. methylthio-α-hydroxybutyric acid.

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- 11. The ammonium sulfate suspension of Claim 10, wherein the concentration of the agricultural solids is between about 30 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 70 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.
- 12. The ammonium suifate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 40 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 60 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.
- 13. The ammonium sulfate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about

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30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.

- 14. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant has a molecular weight between about 300 and about 1000.
- 15. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)<sub>9.5-11</sub> ethanol, dodecylphenoxy poly(ethylene oxide)<sub>9</sub> ethanol, octylphenoxy poly(ethylene oxide)<sub>7</sub> ethanol, octylphenoxy poly(ethylene oxide)<sub>5</sub> ethanol, and nonylphenoxy poly(ethylene oxide)<sub>4</sub>.
- 16. The agricultural solids suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of a C<sub>12</sub>-C<sub>14</sub> secondary aliphatic alcohol (ethoxylate)<sub>9</sub>, a C<sub>12</sub>-C<sub>14</sub> secondary alcohol (ethoxylate)<sub>12</sub>, undecanol (ethoxylate)<sub>9</sub> and oleyl (ethoxylate)<sub>10</sub>.
- 17. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is is dodecylphenoxy poly(ethylene oxide)<sub>9,5-11</sub> ethanol.
- 18. The ammonium sulfate suspension of Claim 10, wherein the glycol liquid is propylene glycol.

CLAI 19-20 (CANCELED)

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21.(New) A stable agricultural solids suspension readily dispersible in water comprising:

- a. agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt.% passable through a Tyler #48 sieve;
- a single non-ionic surfactant selected from the group consisting of alkylphenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols,
  ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids;
- c. a water-soluble glycol fiquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol; and
- d. at least one member selected from the group consisting of diammonium phosphate ((NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>) and the isopropylamine salt of N-(phosphonomethyl) glycine.
- 22.(New) The agricultural solids suspension of Claim 21, wherein the concentration of the agricultural solids is between about 20 wt.% and 80 wt.%; the concentration of the glycol liquid is between about 20 wt.% and about 80 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

- 23.(New) The agricultural solids suspension of Claim 21, wherein the concentration of the agricultural solids is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.
- 24.(New) The agricultural solids suspension of Claim 21, wherein the agricultural solids consist of at least one member of the group consisting of ammonium sulfate ((NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>), diammonium phosphate ((NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>) and the isopropylamine salt of N-(phosphonomethyl) glycine.
- 25.(New) The agricultural solids suspension of Claim 21, wherein the molecular weight of the non-ionic surfactant is between about 300 and 1000.
- 26.(New) The agricultural solids suspension of Claim 21, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)<sub>9.3-11</sub> ethanol, dodecylphenoxy poly(ethylene oxide)<sub>9.3-11</sub> ethanol, dodecylphenoxy poly(ethylene oxide)<sub>5</sub> ethanol, octylphenoxy poly(ethylene oxide)<sub>5</sub> ethanol, and nonylphenoxy poly(ethylene oxide)<sub>4</sub>.

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27. (New) The agricultural solids suspension of Claim 21, wherein the non-ionic

surfactant is selected from the group consisting of a C12-C14 secondary aliphatic

alcohol (ethoxylate), a C12-C14 secondary alcohol (ethoxylate)12, undecanol

(ethoxylate), and oleyl (ethoxylate)10.

28.(New) The agricultural solids suspension of Claim 21, wherein the non-ionic

surfactant is dodecylphenoxy poly(ethylene oxide)9,5-11 ethanol.

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- 29.(New) The agricultural solids suspension of Claim 21, wherein the glycol liquid is propylene glycol.
- 30.(New) A stable suspension of ammonium sulfate ((NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>) readily dispersible in water, the suspension comprising:
  - a. ammonium sulfate particles more than about 99 wt.% passable through a Tyler #48 sieve.
  - a single non-ionic surfactant selected from the group consisting of alkylphenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols,
    ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids;
  - c. water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol; and
  - d. at least one member selected from the group consisting of diammonium phosphate ((NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub> and the isopropylamine salt of N-(phosphonomethyl) glycine.
- 31.(New) The ammonium sulfate suspension of Claim 30, wherein the concentration of the agricultural solids is between about 30 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 70 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

- 32. (New) The ammonium sulfate suspension of Claim 30, wherein the concentration of the ammonium sulfate is between about 40 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 60 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.
- 33. (New) The ammonium sulfate suspension of Claim 30, wherein the concentration of the ammonium sulfate is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.
- 34.(New) The ammonium sulfate suspension of Claim 30, wherein the non-ionic surfactant has a molecular weight between about 300 and about 1000.
- 35.(New) The ammonium sulfate suspension of Claim 30, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)<sub>9.5-11</sub> ethanol, dodecylphenoxy poly(ethylene oxide)<sub>9</sub> ethanol, octylphenoxy poly(ethylene oxide)<sub>5</sub> ethanol, and nonylphenoxy poly(ethylene oxide)<sub>4</sub>.
  - 36.(New) The agricultural solids suspension of Claim 30, wherein the non-ionic surfactant is selected from the group consisting of a C<sub>12</sub>-C<sub>14</sub> secondary aliphatic alcohol (ethoxylate)<sub>9</sub>, a C<sub>12</sub>-C<sub>14</sub> secondary alcohol (ethoxylate)<sub>12</sub>, undecanol (ethoxylate)<sub>9</sub> and oleyl (ethoxylate)<sub>10</sub>.

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37.(New) The ammonium sulfate suspension of Claim 30, wherein the non-ionic surfactant is dodecylphenoxy poly(ethylene oxide)9,5-11 ethanol.

38.(New) The ammonium sulfate suspension of Claim 30, wherein the glycol liquid is propylene glycol.